

Recommendations

Clearly, there is material along many roads and under some open fields in Pines that shows gamma-ray counts over normal background levels. Further investigation is necessary to determine what this material is, its radiation isotopic composition, its isotopic concentration, and its projected health risk. Determination should also be made as to whether Pines well water has been affected by radionuclides.

PINES makes the following recommendations.

Confirmation be made of PINES' data.

Determination be made as to the component giving elevated gamma-ray count rates (e.g., black glittery material?).

Determination be made by gamma spectroscopy as to the isotopic identities of the gamma-ray emitters.

Determination be made as to the isotopic concentration of the principal gamma-ray emitters. If, as seems probable, these are products in the three natural decay series, then concentrations should be made for radium-226, radium-228, isotopic uranium, and isotopic thorium.

Review be made of well data from Pines citizens to determine if radium-226, radium-228, uranium-238, uranium-234, and uranium-235 have been measured so that a judgment can be made as to whether the Total Radium and/or the Total Uranium concentrations can be compared to those in the Drinking Water Act.